Participatory Rapid Livestock Appraisal Report

Quetta Project Region
October, 2012
The Agribusiness Project

Acronyms

ASF	Agribusiness Support Fund
FGD	Focused Group Discussion
GDP	Gross Domestic Product
KP	Khyber Pakhtunkhwa (province)
NPC	National Production Cost
PRLA	Participatory Rapid Livestock Appraisal
QPR	Quetta Project Region
TAP	The Agribusiness Project
TMA	Tehsil Municipal Administration
USAID	United States Agency for International Development

Table of Contents

List of Tables

List of Figures

Executive Summary

The Agribusiness Project funded by USAID Pakistan is being implemented by Agribusiness Support Fund (ASF) in collaboration with International and national partner organizations. This five years project, commenced on 10th November, 2011 and aims at increasing competitiveness and productivity of horticulture and livestock sub-sectors in Pakistan. The overall goal of the Project is to support improved conditions for broad-based economic growth, create employment opportunities and contribute to poverty alleviation through increase in competitiveness of horticulture and livestock value chains in partnership with all stakeholders. During the first year of the project, a preparatory program was undertaken to gauge the potential of the sub-sector and to prioritize value chains for various project regions including the Quetta Project region. Findings from the Participatory Rapid Livestock Appraisal (PRLA) will enable the project to identify and prioritize livestock value chains, opportunities, constraints and state of the business development services to provide required basis for focusing project interventions.

Within the framework of the cluster and value chain approach, a two-prong approach was adopted, first preparation for PRLA exercise in the field and second to collect secondary data and develop appropriate tools for quantification of factors so that it can be measured on a scale for ranking/prioritization. This report pertains to work completed based on both secondary data and primary appraisals of livestock sub-sector.

The PRLA methodology provides for probing, analysis and validation of information as they unfold during the field work. Seven factors were applied for the quick analysis of the sub-sector. These include; (i) extent of employment generation; (ii) commercial worth; (iii) percentage of small farmers associated; (iv) women involvement; (v) households associated with the value chains; (vi) understanding growth potential; and (vii) vulnerability of the concerned value chains. Covering 50% of the districts, the exercise was undertaken in the randomly selected settlements/villages within each cluster/region. Each focus group consisted of 10-15 stakeholders, a representative sample of sub-sector, whereas, 2-3 FGDs were carried out in each district.

According to Livestock Census Report 2006, the province maintains 2.25 million of cattle, 12.8 million of sheep, 11.78 million of goats and 0.319 million of buffaloes. Sheep constitute 48.3% and goats 21.9% of Pakistan's population of sheep and goats, respectively. The province caters to the needs of leather and carpet industries by supplying hide and wool to these sectors. Moreover, the Livestock is the mainstay of more than 75% of the people inhabiting in the countryside of Balochistan.

The primary data collected through FGDs informed that milk and meat were the priority value chains in livestock subsector having the potential to be considered for further exploration and development by TAP. According to analysis, meat has scored 3.8 points while milk followed with 3.4 index points. Analyzing various prioritization factors down the Grid it has been found that commercialization in milk is 94.8% while that in meat is 95.6%. Similarly involvement of small farmers was found to be 83.3% in milk and 76.7% in meat. The rate of employment in meat and milk is 20.7% and 8% respectively. Similarly, household involvement was rated at 9% in meat and 2.8% in milk. Losses were recorded to be around 6.7% in meat and 2.2% in milk. Growth over the past five years was found to be 15% in milk and 17.3% in meat. Women involvement in milk was recorded at around 15% no involvement of women is reported in meat value chain.

Presence of Livestock Department at the district level, existence of Livstock Development, Veteniary Services and Commercial banks in many districts of the region, availability of vast range of natural pastures, and abundance of sheep and goats were identified to be the leading opportunities for the livestock sector growth. On the other hand constraints limited resources, lack of awareness and training, insufficient medical facilities, absence of slaughter houses, scarcity of drinking water for animals, fast depleting pastures, low productivity, and lack of processing facilities have been identified as majer constraints.

Introduction

Background

The Agribusiness Project funded by USAID, is being implemented by Agribusiness Support Fund (ASF) in collaboration with International and national partner organizations. This five years project, commenced on 10th November, 2011 and aims at increasing competitiveness and productivity of horticulture and livestock sub-sectors in Pakistan. The overall goal of the Project is to support improved conditions for broad-based economic growth, create employment opportunities and contribute to poverty alleviation through increase in competitiveness of horticulture and livestock value chains in partnership with all stakeholders.

The Agribusiness Projects objective is to: i) To strengthen the capacity in horticulture and livestock value chains to increase sales to domestic and foreign markets; ii) Strengthen capacity of small holder and enterprises to operate autonomously and effectively; and ; iii) increased agriculture/livestock efficiency and productivity through adoption of new farming techniques and technological innovations among targeted beneficiaries. Project's activities encompass focused technical and capacity building assistance to upgrade and strengthen capacities in the priority value chains in both livestock and horticulture sectors; and a national cost sharing grants program offering a wide range of customized assistance to key players within the priority value chains.

During the first year of the project, a preparatory program was undertaken to gauge the potential of the sub-sectorand to prioritize value chains for various project regions including the Quetta Project region. PRLA is a short cut yet efficient method for data collection. It is a methodology for action research that uses a range of techniques and plays an important role in probing, developing, analyzing and using indigenous knowledge as a foundation from which to build more productive, valid and sustainable platform for the field work. Findings of the PRLA will enable the project to identify and prioritize livestock value chains, opportunities, constraints and state of the business developmentservices to provide required basis for focusing project interventions.

The Livestock sector is broad and covers highly diverse agro-ecological, social and economic dimensions acrosscountries, regions and continents. In Pakistan, livestock is an integral component and considered as the backbone of the agriculture sector, as in any other agricultural economy. The livestock accounts approximately 55.1% of the agriculture value added and 11.5% to the Gross Domestic Product (GDP). Almost 35-40 million rural households are dependent on livestock for their livelihood, deriving 30-40%of their income from livestock. The primitive state of infrastructure and technology catalyzed by the limited availability and high cost of inputs has halted the growth of a polymorphic, high value livestock sub sector that, if driven in the right direction, can contribute towards food security, import substitution, export led growth and poverty alleviation through employment generation. Pakistan has immensely large livestock resources and there is need to exploit and utilize these resources for the substantial growth of the sector. There is a need to focus on understanding productivity gaps, factors blocking development and expansion of livestock value chains, to identify hurdles causing bottlenecks, uncertainties and inefficiencies that hinder competitiveness. Interventions are required across all nodes of the livestock value chains, especially value addition, processing and marketing in order to increase the competitiveness and enhance capabilities of value chain operators to respond to domestic, regional and international markets.

The reports articulate for each region separately to enable better targeting and focusing project interventions. This report covers the project region of Quetta. Within the framework of the cluster and value chain approach, a two-prong approach was adopted, first preparation for PRLA exercise in the field and second to collect secondary data and develop appropriate tools for quantification of factors so that it can be measured on a scale for ranking/prioritization. This report pertains to work completed based on both secondary data and primary appraisals of Livestock sub-sector.

The Region

Balochistan is the largest province of Pakistan and covers 44% of the land area of the country with a total landmass of 347,190 sq. km. Balochistan has an estimated 7.45 million inhabitants according to 1998 census, corresponding to the population density of only 19 persons per sq. km. An estimated 76.7% of the population lives in rural Balochistan, while the remaining 23.3% lives in the urban areas. Out of the total land area of Balochistan almost 92% consists of arid grazing lands, barren Rocky Mountains and deserts. Only 10 million hectares are reasonably productive grazing lands. The economy of the province is dominated by agriculture including livestock and fisheries.

The Quetta Project Region includes all districts of Balochistan Province except the districts of Lasbella being covered by Karachi project region andNasirabad, Jaffarabad and KamarShadadKot that are being covered by Sukkur Project Region.

Figure 1 : Quetta Project Region
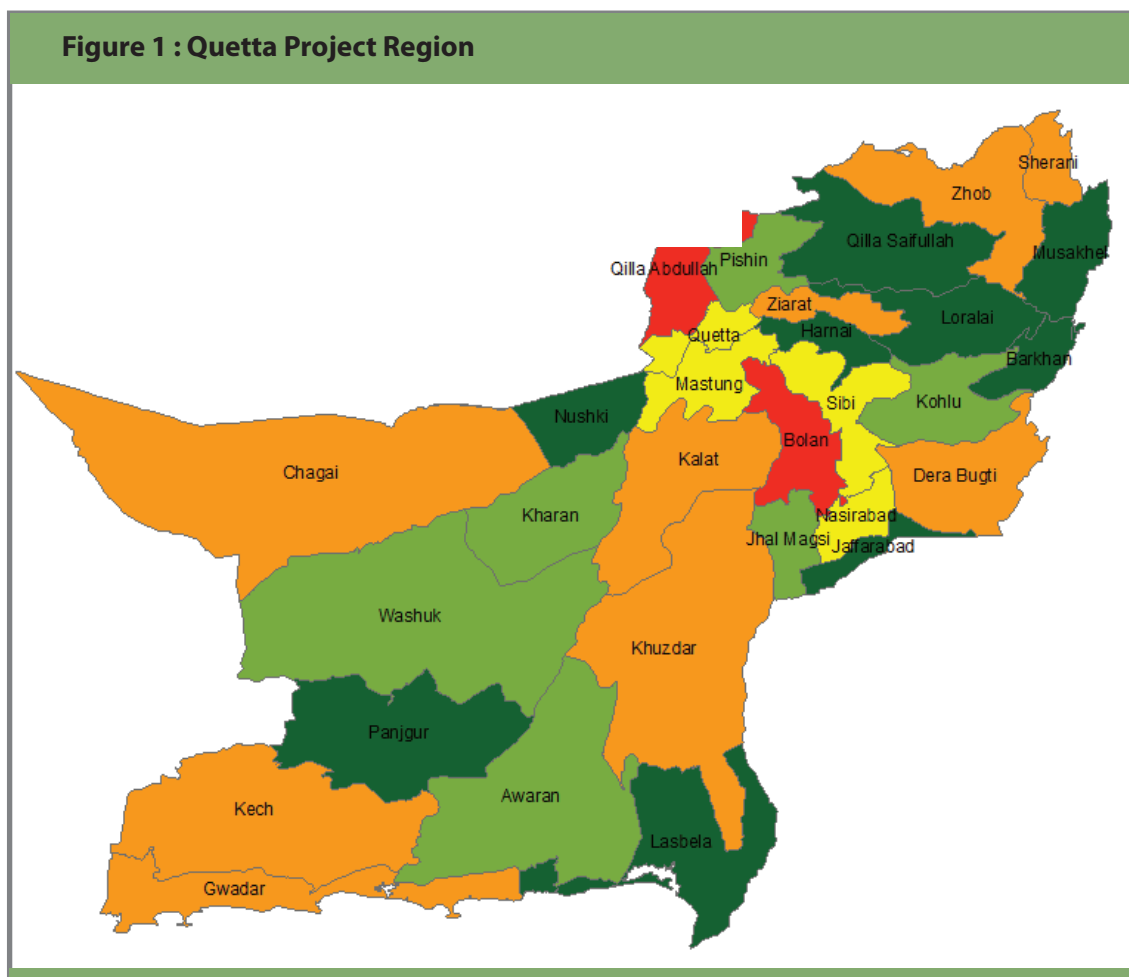
Objectives
The objectives of PRLA exercise were to a) identify and prioritize the key livestock value chains in terms of growth potential and capability to benefit as many stakeholders across the value chains b) Identify relevant constraints impeding the realization of opportunities c) assess current state of the extension services to the livestock farmers and d) explore linkages of key livestock stakeholders with the local and national markets.

The PRLA was conducted with a view to prepare the stage for focusing project intervention as well as for the project baseline and value chains benchmarking studies. The PRLA results will enable the project to prioritize value chains (validating the cluster approach), set benchmarks, and support establishment of a database to generate primary data on key indicators to be maintained and updated during the course of project implementation and afterwards supporting the planning, monitoring, evaluation and communication functions of the project.

Methodology and Approach

The consultant(s) assisted the project staff in undertaking a strategic exercise for identification and prioritization of the value chains to prepare a stage for the baseline study and in close consultation with the project management adopted the following methodology to undertake the PRLA exercise.

Desk Review and Study Matrix
The PRLA team , within the framework of the cluster and value chain approach, reviewed the existing data, including the secondary data on the livestock sector, published reports and developed objective criteria for prioritization of value chains within the livestock subsectors i-e, Dairy, Meat, Livestock by products value chains.

The PRLA team, prior to inception of the field work, developed approach and methodology for the study based on international best practices. The methodology focused on quantification of factors, by assigning appropriate weights and scales, so as to contribute to ranking and selection of the priority value chains based on a seven factored grid analysis that included (i) extent of employment generation; (ii) commercial worth; (iii) percentage of small farmers associated; (iv) women involvement; (v) households associated with the value chains; (vi) understanding growth potential; and (vii) vulnerability of the concerned value chains.

Data Collection Tools and Techniques
The PRLA team developed and pre-tested tools for undertaking the rapid appraisal exercise in project regions. These tools included;

i)   A five factored grid analysis matrix
ii) Paired ranking matrix for opportunities and constraints
iii) Venn-diagrams for mapping market linkages and service providers:

These tools were pre-tested in the field before being applied to collect primary data by holding Focus Group Discussions (FGDs) with selected groups of relevant stakeholders such as livestock farmers, inputs suppliers, processors, traders, retailers and service providers. Later the data collected through FGDs was verified through validation workshops.

Sample Size
The PRLA exercise was undertaken in all project regions to validate production clusters and establish priority value chains on a regional level. 2-3 FGDs were facilitated and conducted in randomly selected settlements/villages within each cluster/region, covering approximately 30% of the districts in each region. A group of 10-15 stakeholders related to the livestock value chains participated in each FGD.

Staff Orientation and Pre-Testing of Tools
The PRLA team designed and co-facilitated a two-step training workshop comprising the orientation of the project staff regarding the use of pre designed tools, FGD facilitation & data collection techniques to be used in the field; and a real pre-testing field exercise followed by a debriefing session to help understand and discuss the constraints faced during the exercise in order to revise and improve the tools and techniques.

Primary Data Collection
The PRLA exercise was facilitated by the project staff, the enumerators hired and trained for the PRLA exercise in the region. The FGDs were organized and data collected by using the questionnaires. The FGDs participants that represented the stakeholders of livestock value chains selected and prioritized value chains through consensus and group discussions in the selected clusters.

Backstopping and Monitoring
The consultants provided a continued coaching and backstopping support to the project staff during orientation, pre-testing and PRLA exercise in project target regions.

Data Analysis and Reporting

The primary data gathered via the field investigations through observations and FGDs was recorded using pre designed tools and later reproduced in tabulated form using MS Excel sheets. The final analysis was done by applying statistical tools to the primary data and shown in the form of bar graphs and tables to provide a highlightedoutlook on the weaknesses and strengths of the livestock value chains.

Appraisal of Livestock Value Chain based on Secondary Data

The secondary data for the livestock sector was obtained from various sources that is Pakistan Livestock census 2006, FAO data base and the USAID's Pakistan Livestock database 2006 to overview the prime source regarding livestock data on district level and national level.

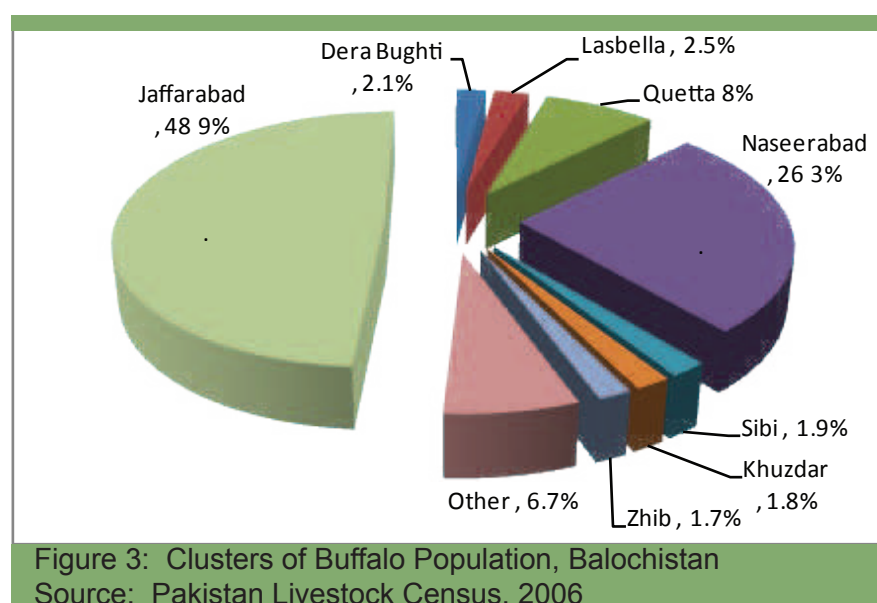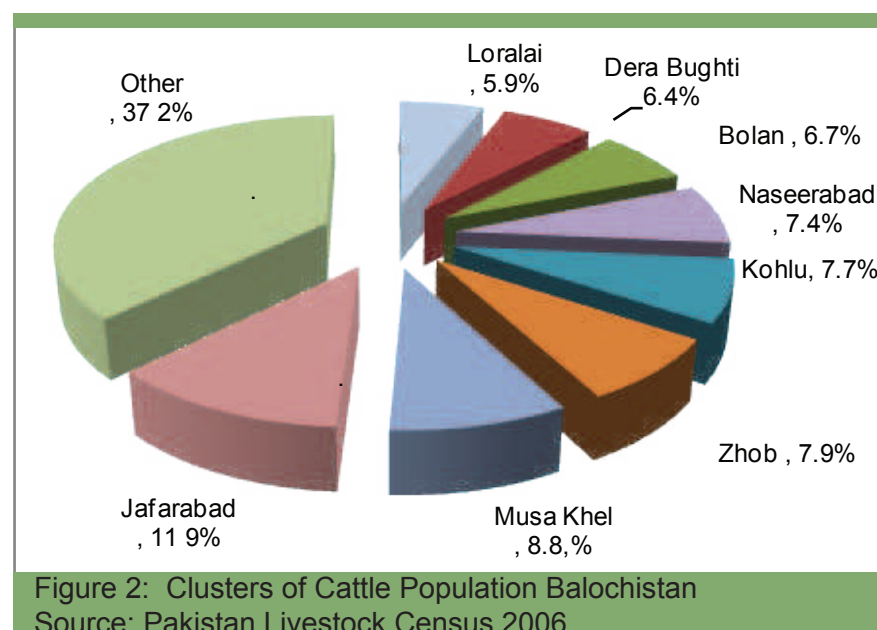| Table 1: Livestock Value Chain analysis at Provincial and National Level									
Column1	**Cattle**	**Buffaloes**	**Sheep**	**Goats**	**Camels**	**Horses**	**Mules**	**Asses**	**Poultry**
Pakistan	29.55881	273.34985	264.8774	537.8699	9.20868	3.44253	1.55698	42.68472	736.47888
Balochistan	22.53581	3.91854	128.0422	117.8471	3.79528	0.59973	0.06256	4.71942	59.11304
Percentage	7.6%	1.2%	48.3%	21.9%	41.2%	17.4%	4.0%	11.1%	8.0%
Source: Pakistan Livestock Census 2006: Agricultural Census Organization									

Livestock in Balochistan has failed to achieve its potential in contributing to increased incomes to the farmers. Growth in output has varied over the years but in general hasbarely kept pace with population growth. In addition to the long draught in the province,which resulted in slow growth rate in sheep population, there are a number of technical constraints in animal production associated with inadequate nutrition, disease, genetic resources and poor management. Most of the farmers do not have adequate knowledge about animal nutrition, disease control and breed selection these results in low meat production per animal.

In addition, there are other constraints that affect the production of livestock includes infrastructural and institutional weaknesses and marketing constraints.The most important issues in the development of the sector include:

1. Improvement in livestock production, animal health, disease control and improvment in the genetic potential of animals.
2. Improvement in livestock Marketing and Trade.
3. Strengthening of support institutions.

This strategy not only recognizes the importance of the current production systems but also look upon the initiatives that could enhance the productivity and production of Livestock.

The analysis on the basis of secondary data gave a broader and comparative outlook of the livestock value chains at regional and national levels. The analysis showed that the Sheep and Goats production is much higher than other part of the country. But due to unawareness and institutional weakness the farmers are not getting the due share from this valuable business.The clusers of Cattle, Buffalo, Sheep and Goats population in Balochistan as per Pakistan Livestock Census 2006 are given below in Figure 2 to 5 respectively.

Figure 2: Clusters of Cattle Population Balochistan
Source: Pakistan Livestock Census 2006

Figure 3: Clusters of Buffalo Population, Balochistan
Source: Pakistan Livestock Census, 2006

Figure 4: Clusters of Sheep Population Balochistan
Source: Pakistan Livestock Census 2006

Figure 5: Clusters of Goat Population Balochistan
Source: Pakistan Livestock Census 2006

The statistical data seen in the above charts make us understand that population of Cattle and Buffalo is more in only two Districts that is Naseerabad and Jaffarabad having vast plane lands while, sheep and goat are mostly found in hilly and mountainous districts of Balochistan. There is very good opportunity to enhance the sheep and goat production to adopt new and modern techniques of farming by strengthening of the institutions and marketing awareness.Following steps should be adopted for the improvement of Livestock sector in the province:

• Increasing the productivity of small scale farmers, by improving production practices, providing better animal health services and improving animal genetic resources.
• Creating opportunities for small farmers to increase their investment / farm size.
• Support to strengthen public and private institutions for auxiliary services in the livestock sector.
• Encourage coordination between support institutions.
• To improve marketing system/ infrastructure for live animals accessing markets for other by products.
• Processing of livestock products and integration of small farmers.
• Improving the quality of livestock products for human consumption.

Appraisal of Livestock Value Chain based on Primary Data

Selection and prioritization of the value chains

The FGD`s conducted in different districts of Balochistan informed that milk and meat are the priority value chains i livestock subsector having the potential to be considered for furher exploration and development by the TAP. According to the analysis conducted meat has scored 3.8 points while milk followed with 3.4 index points. A graphical illustration of the summarized overview of proritization is shown in figure 6.

Figure 6: Prioritization of livestock value chains
Source: PRLA field exercise, October 2012

Factor-wise Prioritazation of Livestock Value Chains

Ranking of the livestock value chain was carried out on the basis of seven factors discussed below.

Prioritization on the basis of percentage employment potential

Rearing of milking animals is a general trend in majority districts of Balochistan, particularly, small ruminants can be found in most of the families, especially those engaged with agriculture. Moreover, significant ratio of women involvement also remains unnoticed. If formal and informal employment and women role are considered the contribution of milk value chain in employment is around 75%, as reported by the secondary data.

The low percentage in employment offered by the two value chains can be understood by the fact that these figures relate to commercial and formal involvement in the two value chains. While employment in meat is mostly formal, the informal and home-based milk activities remain unnoticed and hence are not properly recorded.

Among livestock value chains, meat has the higher potential of 20.7% for employment generation while milk value chain has the ability to create 8.0% employments shown in Figure 7 below.
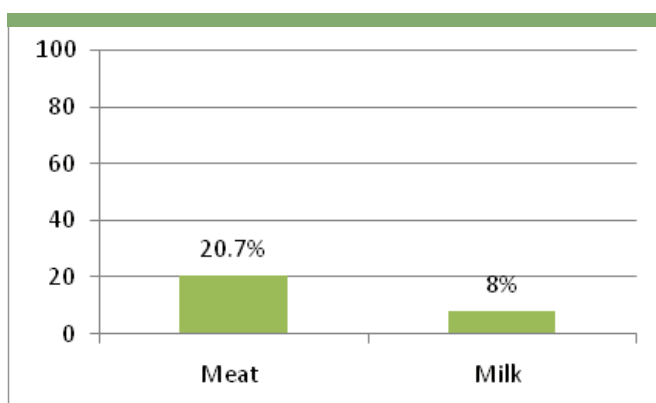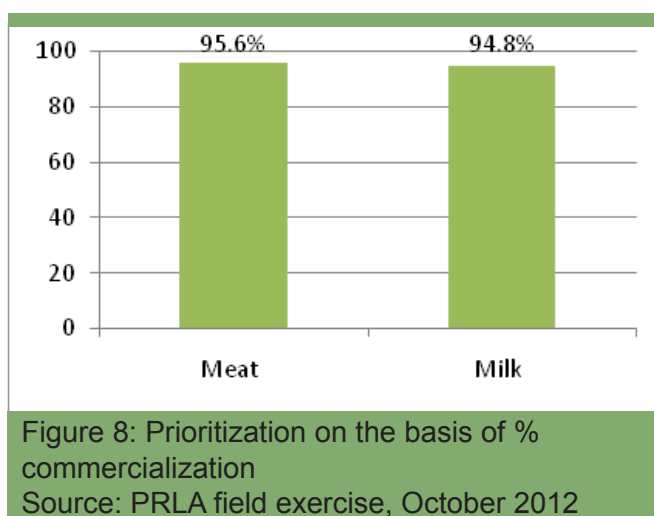

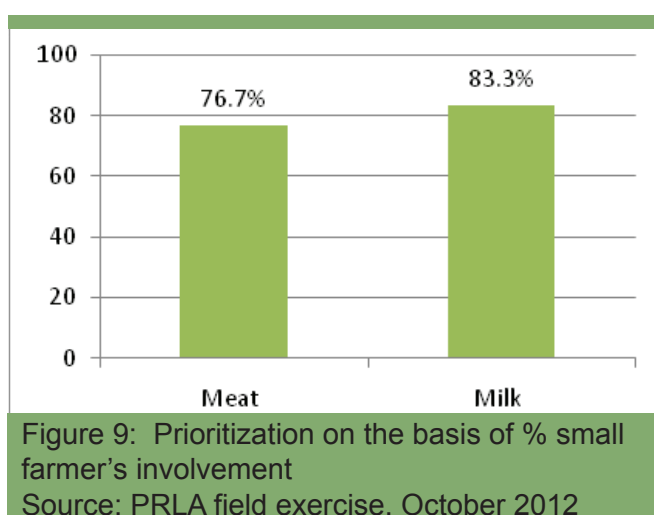Figure 7: Prioritization on the basis of % employment potential

Prioritization on the basis of percentage commercialization

Commercialization can be described as the percentage of the product that is marketed. The data collected from FGDs showed that meat is 95.6% commercialized. In Quetta Project Region, 94.8% commercialization is being observed in milk sector. The prioritization on the basis of commercialization can be seen in Figure 8.

Figure 8: Prioritization on the basis of % commercialization
Source: PRLA field exercise, October 2012

Prioritization on the basis of percentage small farmer's involvement

The assessment of livestock value chains on the basis of small farmer involvement in Quetta Region revealed that milk value chain has the highest percentage (83.3%) of small farmer's involvement. Whereas 76.7% of small farmers are involved in meat business. Relatively high percentage of small farmer's involvement in milk related business is due to the fact that small number of milking animals is reared by almost every family associated with agriculture. Milking and feeding of these animals is usually managed by women inside their homes.

Figure 9: Prioritization on the basis of % small farmer's involvement
Source: PRLA field exercise, October 2012

Prioritization on the basis of percentage women involvement

Women involvementis an important factor for prioritization of the value chains. However, as compared to other provinces of Pakistan, women involvement in livestock management in Balochistan is negligible due to local traditions, culture and prevailing value system. As visible in Figure 10, women involvement could not be recorded in the meat value chains; however, 4.8% women involvement was found in the milk value chain, particularly, the small ruminants (sheep and goat) that are reared domestically. This involvement is mostly related to feeding, milking and milk processing. Women also assist in management of cow and buffalo when these are reared domestically in small number. This involvement mostly goes unnoticed and unpaid.
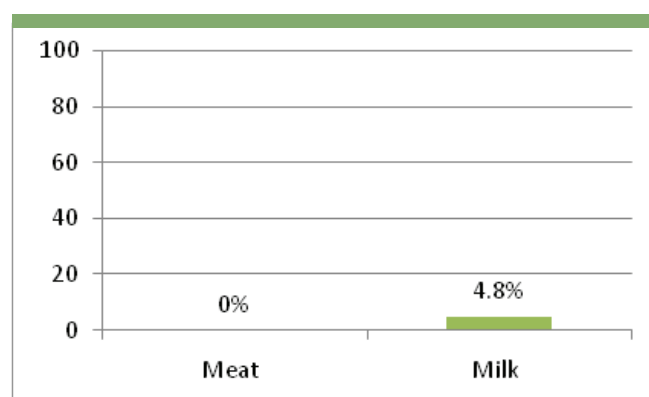
Figure 10: Prioritization on the basis of % women involvement
Source: PRLA field exercise, October 2012

Prioritization on the basis of percentage growth during past five years

Growth is the most important factor for prioritization of a value chain as it gives a clear idea of the potential subsector in a particular region. The livestock value chain was assessed on the basis of their growth observed during the past five years in Quetta Region. Figure 11 below reflects 17.3% and 15% growth rates for meat and milk value chain respectively during the past five years.

Figure 11: Prioritization on the basis of % growth during past five years
Source: PRLA field exercise, October 2012

Prioritization on the basis of percentage losses

Losses were also considered important factor for prioritization of the value chains. According to the data collected to prioritize losses, comparatively more losses (6.7%) were recorded in meat followed by milk with 2.2% losses. Primary factors for relatively low percentage of losses in milk are instant marketing, availability of traditional chillers for transportation, use of freezers to keep milk fresh for longer time and processing of unsold milk for value addition. Storage and processing opportunities in meat are very limited, particularly in small scale businesses.
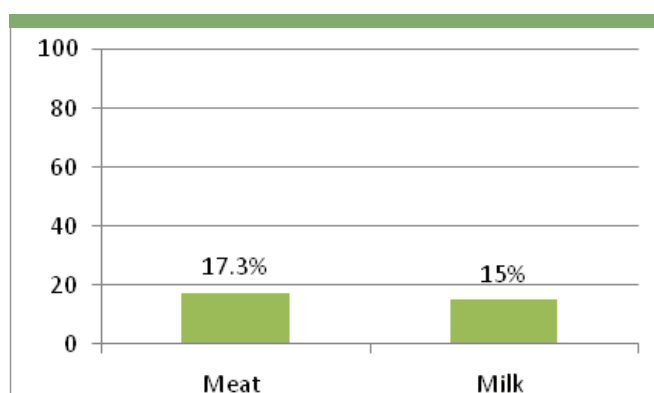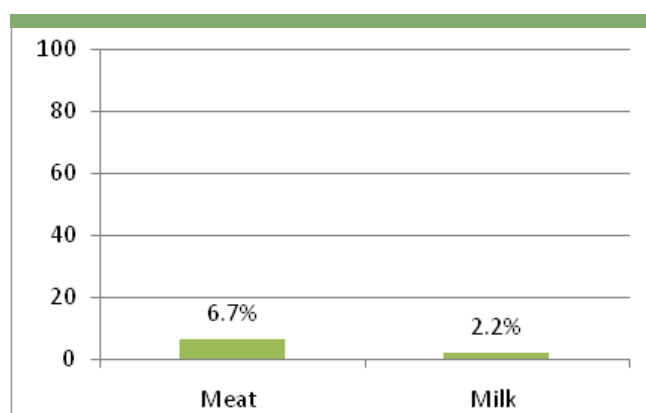

Figure 12: Prioritization on the basis of % losses
Source: PRLA field exercise, October 2012

Prioritization on the basis of percentage household involvement

The data collected throgh FGD`s reveals 9% household involvement in meat and 2.8% in milk. This situation is similar to that in percent employment. Meat related involvement is largely formal and professional where informal/home-based activities are negligible; however, as regards milk value chain the situation is completely different. The informal/home-based rearing of animals for milking purpose is more than formal sector. If only formal sector involvement is considered, these figures seem relevant but if informal sector is also included the percentage in milk is more than 70%.

Figure 13: Prioritization on the basis of % household involvement
Source: PRLA field exercise, October 2012
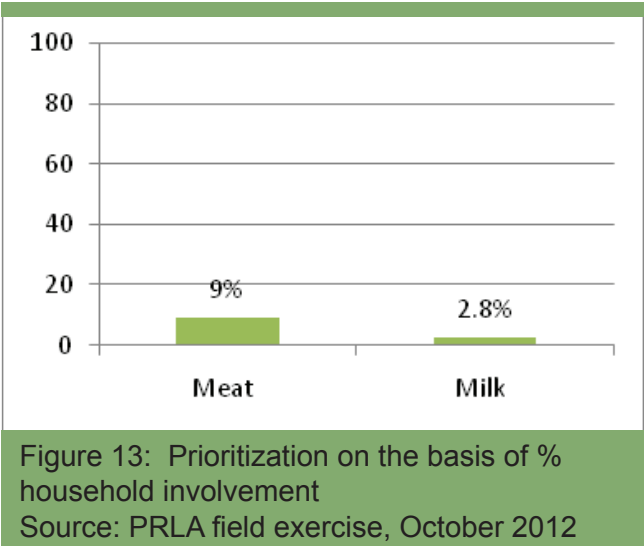
Prioritized Opportunities in Milk and Meat

The prioritized opportunities, in meat and milk value chains, scored and ranked by the participants of FGDs in Quetta region are listed below in Table 2 and 3.

Table 2: Priority opportunities in milk		
Priority opportunities	**Score**	**Rank**
Govt. Livestock Department	5	1
Banks/ Commercial Banks	4	2
Livestock Department	3	3
Local Market	3	3
Medical facilities	3	3
Dairy Farms	2	4
Development of new and improved Dairy Farms	1	5
Awareness raising Sessions	1	5
Source: PRLA field exercise October, 2012		

Table 3: Priority opportunities in meat		
Priority opportunities	**Score**	**Rank**
Govt. Livestock Department	5	1
Medical facilities	3	3
Pasture Land available for grazing	3	3
Banks	2	4
Livestock Department	1	5
development of new and improved Dairy Farms	1	5
Large number of sheep available	1	5
Source: PRLA field exercise October, 2012		

Prioritized Constraints in Milk and Meat

The table 4 below shows that the major constraints, in the region lack of awareness, lack of finances for further investment, small investment due to shortage of finances, lack of land and places to add more livestock, lack of medical facilities, no proper management of dairies, poor quality and quantity of feed, low productivity, lack of processing facilities and unawareness regarding hygiene.

Table 4: Priority constraints in milk	
Priority constraints	**Intensity**
Lack of awareness	High
Lack of Finances for further Investment	High
Small investment due to shortage of finances	High
Lack of Land and Place to add more livestock	High
Lack of Medical facilities	High
lack of water facilities	High
No proper management of Dairies	High
Poor quality and quantity of feed	High
Low Productivity	High
Lack of processing facilities	High
Un-awareness regarding hygiene.	High
Dumped waste material	Medium
Source: PRLA field exercise October, 2012	

These constraints can be addressed through training of farming communities, regarding improved farm management practices, timely and efficient availability of veterinary health services, establishment of processing units and easy access to soft loans can help resolve financial issues hampering the growth of dairy value chain. The major constraints identified during FGD`s were meat value chain lack slaughter houses, unavailability of lab test of slaughtered animals, water shortage and unawareness regarding calf rearing and feedlot fattening and proper veterinary services. The priority constrarints in meat can be seen in Table 5 below.

Table 5: Priority constraints in meat	
Priority constraints	**Intensity**
Appropriate place for Meat in the market area	Medium
Lack of Slaughter Houses	High
Unavailability of Lab test of the slaughtered animal	High
Water shortage	High
Source: PRLA field exercise October, 2012	

State of the Services Providers in Milk and Meat

Although several NGOs, development projects and private sector services providers are actively involved in milk and meat value chains, the secondary and primary data does not provide detailed information about the state of any significant stakeholders in the private and public sectors except the livestock department, which has presence in almost all districts of the province. However, this public facility is faced with limited infrastructure, scarcity of required equipment, medicine and vaccines, and efficient staff trained in modern techniques of livestock management. Other stakeholder may include the banks that can facilitate livestock sector development. Market agents and middlemen in both milk and meat make another important group of stakeholders that is leading today's meat and milk market of Balochistan.

Table 6: State of the service provision in milk and meat			
Service Providers	**District**	**Strength**	**Services Provided**
Veterinary Hospital	Killa Abdullah	Medium Linkages	Medical facility
	KillaSaifullah	Medium Linkages	Medical facility
Veterinary Hospital	Quetta	Medium Linkages	Medical facility
	Pishin	Medium Linkages	
	Mastung	Weak Linkages	
	Kalat	Medium Linkages	
	Killasaifullah	Medium Linkages	
Source: PRLA field exercise October, 2012			

Presence of Livestock Department
The department is present at the district level and initial required infrastructure available. However, the department needs to be further strengthened through provision of required medicine, vaccines and trained staff. The department also needs to jointly work with the extension department to develop close linkages with the farmers and arrange awareness rising sessions about seasonal diseases and proper use of medicines and vaccines. The department also needs to arrange livestock management training for the farmers.

Banks
Agriculture Development and Commercial banks exist in many districts of the region but their effectiveness remain limited due to cumbersome procedures, difficult documentation requirements and conditions that are alien to the local culture and existing value system. To be more effective in serving the livestock holders, the banks need to revisit their terms and procedures in light of the local realities.

State of Market Linkages in Milk and Meat

There is significant production of livestock in Balochistan, which is increasing day by day; the province owns more than 46% of the country's total herds. More than one third of people of Balochistan are directly or indirectly involved in livestock business especially sheep and goats.

The primary data collected through FGDs informs that 96% milk and 95% meat produced in different districts of Baluchistan is marketed and consumed in the local market situated at a distance of not more than 05 kms; cost of transportation to these markets is thus negligible. Only hides and wool are transported to distant markets of other provinces in raw form. The province can export sheep and its by-products to Saudi Arabia, UAE, Bahrain, Qatar and Kuwait to meet their demands but poor export policies and traditionally passive marketing strategies have overshadowed this business.

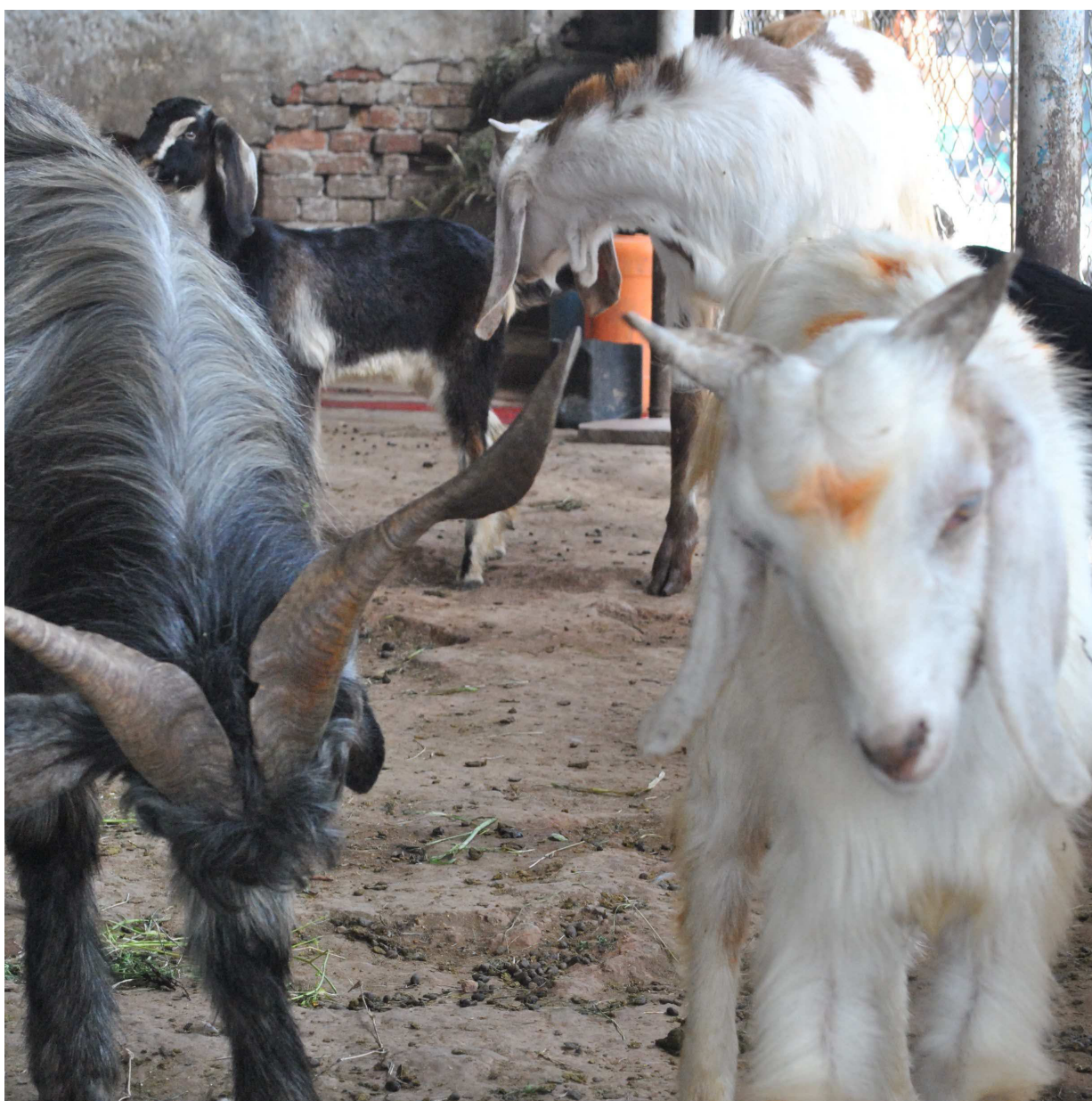| Table 7: State of market linkages in milk and meat			
Sub-sector	**District**	**Linked Market**	**Strength**
Milk	Quetta	Local Market	Strong Linkages
Milk	Pishin	Local market	Medium Linkages
Milk	Mustung	Local Market	Medium Linkages
Milk	Kalat	Local Market	Medium Linkages
Milk	Killa Abdullah	Local Market	Medium Linkages
Milk	KillaSaifullah	Local Market	Medium Linkages
Meat	Killa Abdullah	Local Market	Medium Linkages
Meat	KillaSaifullah	Local Market	Medium Linkages
Source: PRLA field exercise October, 2012			

Conclusion

The following conclusions have emerged:

1. Milk and meat are the leading value chains in Quetta project region having the potential to be further developed for improved productivity.

2. The livestock sector plays a significant role in the economy of Balochistan. It is an important source of livelihood and a major source of income for livestock owners.

3. There is a great potential for increasing livestock production, particularly of small ruminants, provided water resources are fully exploited. The productivity and quantity of small ruminants can be increased through public investment by disease control, improving livestock extension services and extending technical assistance to the dairy farm industry.

4. The livestock sector, particularly milk and meat industry, needs financial assistance in order to liberate them from the clutch of the middlemen. This would increase their productive capacity, which would have far-reaching implications on the livestock sector.

5. It is essential to synchronize the policies of local, provincial, federal government, donors and private sector for livestock development. Moreover the NGOs can play a significant role in livestock improvement in the province.

6. It was observed that most of the beneficiaries of government/donors schemes are rich and influential persons of the community, while the poor people have no access, no knowledge and courage to benefit from these services. Therefore, the need arises to organize the poor people through NGOs in the form of community organizations so that they may be able to benefit from the fruits of development.

7. Shortage of data on livestock activities was noted and people have also complained that veterinary staff rarely visits the village for curative and preventive purposes. Therefore, institutional capacity of this sector at district level should be enhanced.

8. Women can play a significant role in this sector. There is a need to recognize, reward and strengthen their existing role through encouragement and provision of training and credit facilities. Efforts in this respect are called for by government as well as NGOs.

www.agribusiness.org.pk